

MANAGING NETWORK TRAFFIC FLOW

INVENTOR NAME: MICHAEL XIE

APPLICATION SERIAL NO. 10/624,941

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REPLACEMENT SHEET

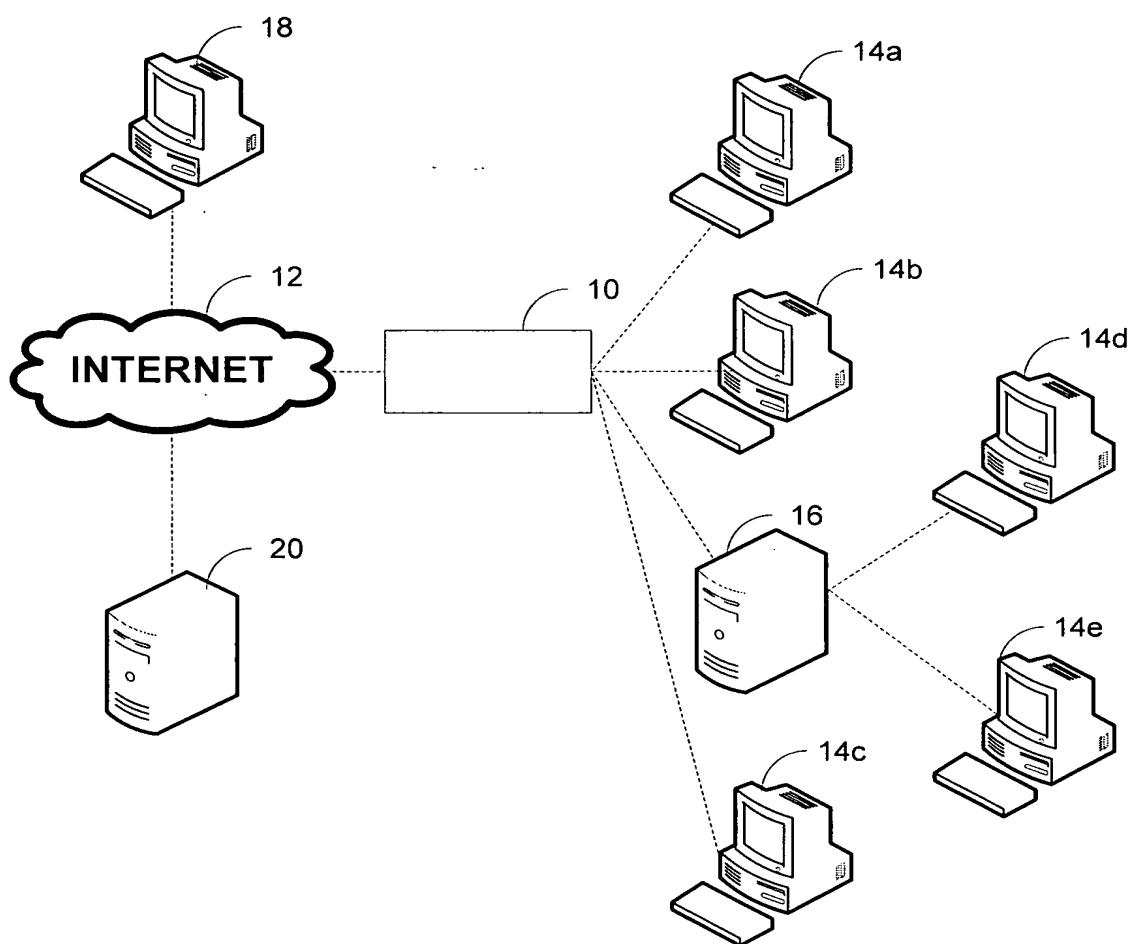


FIG. 1

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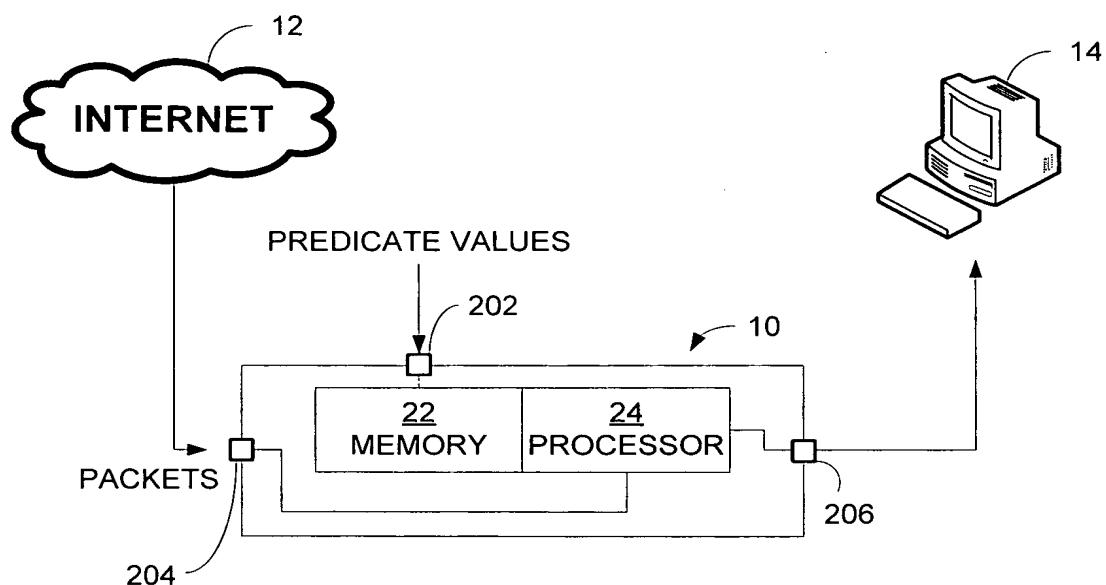


FIG. 2

MANAGING NETWORK TRAFFIC FLOW

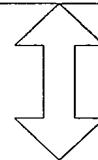
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304
EXTERNAL STORAGE, SRAM/CAM OR OTHER MEMORY
DEVICES STORES SIGNATURE AND PATTERN
INFORMATION ABOUT VIRUS, ATTACKS, ETC.



306

INTERNAL STORAGE, STORES,
SIGNATURES, PATTERNS THAT
ARE ACCESSED MOST
FREQUENTLY

302

I/O BUFFER AND LOGIC TO INTERACT
WITH INTERNAL AND EXTERNAL
STORAGE

314

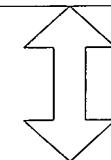
SCANNING LOGIC

312

REGISTER

308

I/O BUFFER AND LOGIC TO
PROTOCOL STACK INCOMING
CONTENT DATA STREAM FOR
EXAMPLE, THROUGH PCI BUS



310

NETWORK TRAFFIC CONTENT IS
DECRYPTED AND STORED HERE

FIG. 3

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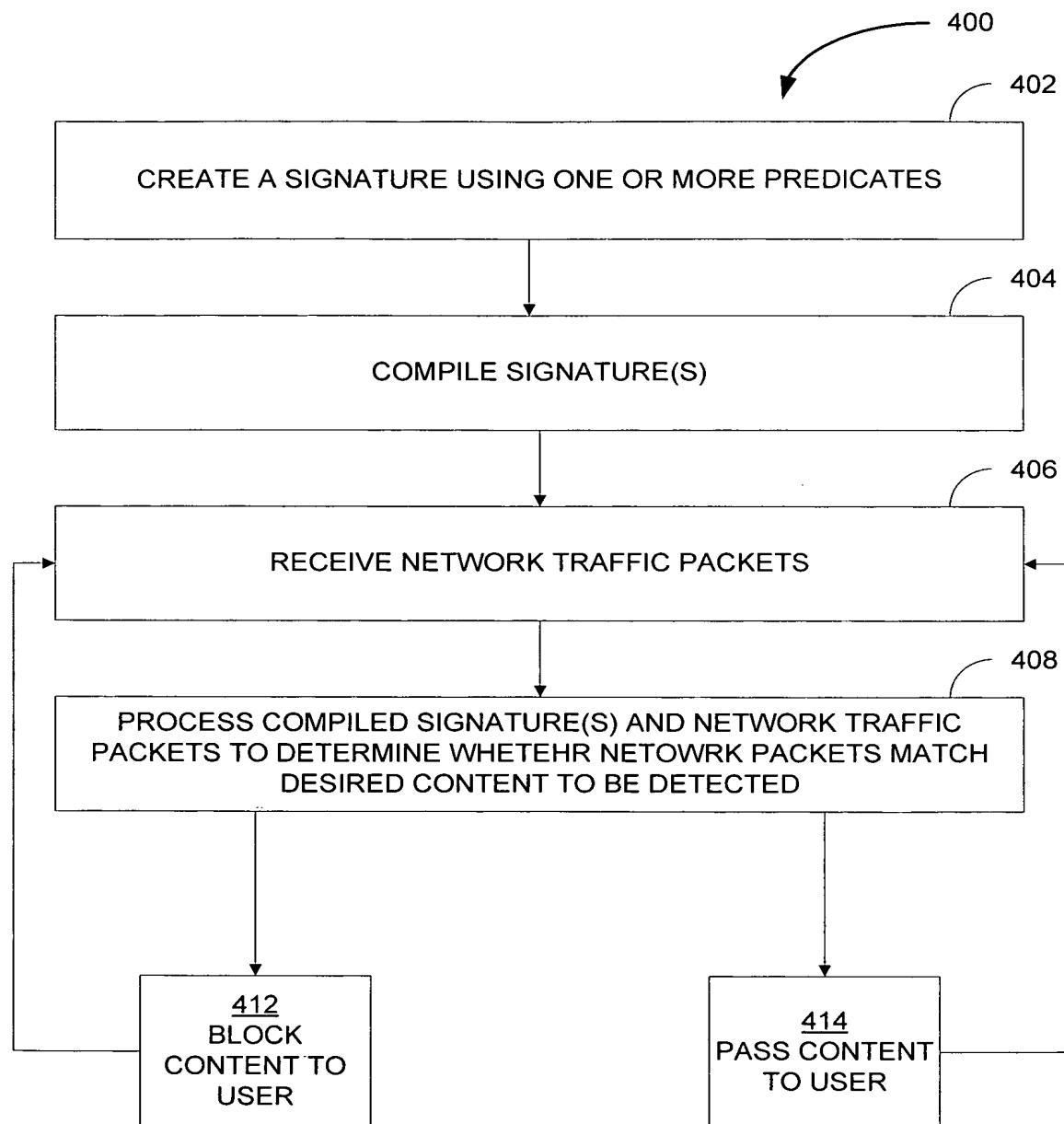


FIG. 4

ID	RETURN	PREDICATE	MNEMONIC	FAMILY	DESCRIPTION
A	B	A(Z)	ASCII	TEST	TEST LITERAL STRING
B	B	B(M)	BITMASK	TEST	TEST USING BITMASK
C	V	C()	CASE	DECISION	BRANCH USING MULTIPLE CASES
D	V	D(LABEL)	DO	ITERATION	START LOOP (ENDS ON LABEL)
E	V	E(F,B,...)	EACH	ITERATION	REPEAT FUNCTION WITH EACH BYTE IN LIST
F	V	F(N, F)	FOR	ITERATION	REPEAT FUNCTION ON N BUFFER BYTES
G	V	G(LABEL)	GOTO	DECISION	GOTO LABEL IN SIG
H	B	H(D)	HEURISTIC	TEST	TEST D AGAINST HEURISTIC FLAGS
I	V	I(F, L)	IF	DECISION	IF TEST F BRANCH ELSE CONTINUE
J	V	J(SIZE)	JUMP	POINTER	JUMP USING BUFFER VALUE OF SIZE
K	B	K(RESERVED)	KEYWORD	FUNCTION	PROCESS KEYWORD
L	B	L(B)	LITERAL	TEST	TEST LITERAL
M	V	M(NAME)	MACRO	FUNCTION	EXECUTE MACRO NAME
N	B	N(LOGIC)	NEAR	TEST	TESTING USING RELATIVE LOGIC
O	B	O(N, METHOD)	ORDER	TEST	ORDER (SORT) N BUFFER BYTES USING METHOD
P	V	P(NAME)	PROCESS/PROCEDURE	FUNCTION	EXECUTE PROCESS NAME
Q	B	Q(LOGIC)	QUERY	TEST	TEST USING RANGED LOGIC
R	V	R(P)	REWIND	POINTER	RESET BUFFER STREAM POINTER
S	B	S(N,K)	SEEK	POINTER	REPOSITION BUFFER STREAM POINTER
T	B	T(LOGIC)	TEST	TEST	TEST USING POSITIONAL LOGIC
U	B	U(Z)	UPPERCASE	TEST	TEST AFTER UPPERCASING BUFFER STRING
V	B	V(LOGIC)	VARIABLE	TEST	TEST USING SET SUMMATION
W	B	W(C)	WILDCARD	TEST	SIMPLY (ONE BYTE) WILDCARDS
X	B	X(B)	XRAY/XOR	TEST	TEST USING XOR MASK BASED ON B

FIG. 5

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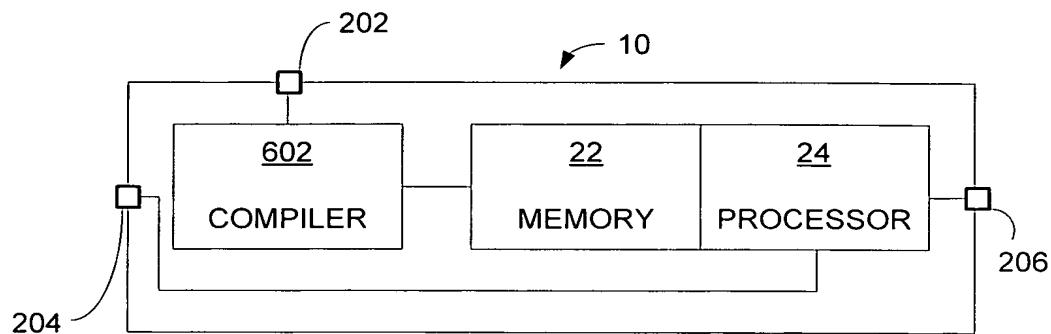


FIG. 6

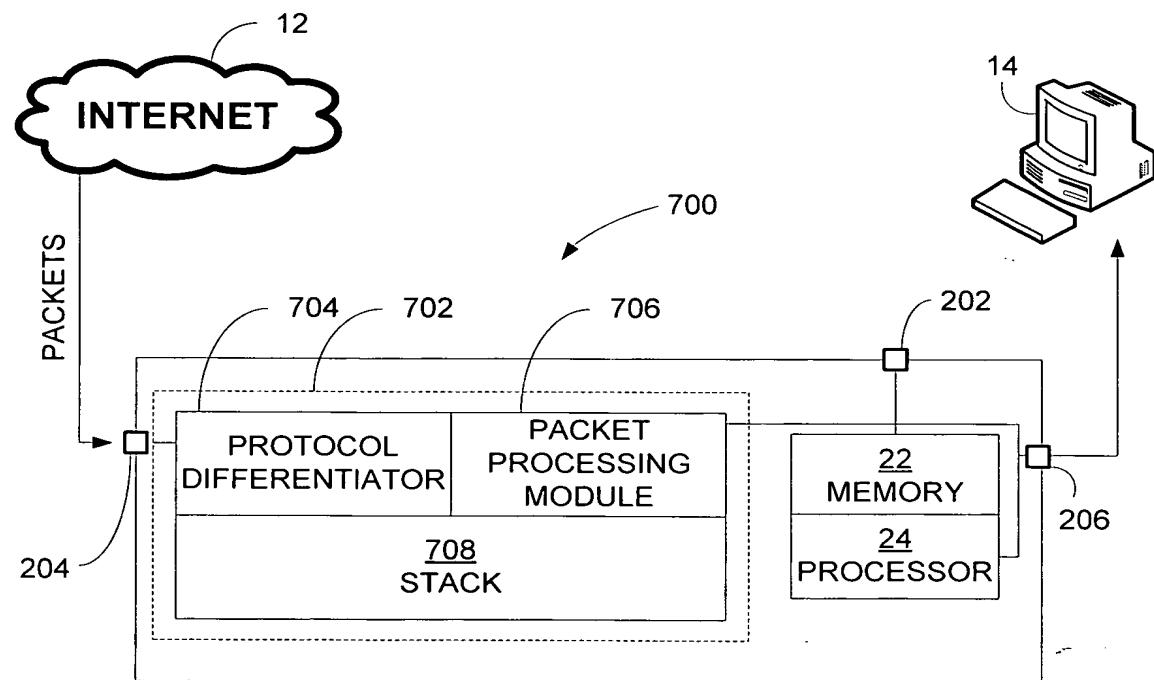


FIG. 7

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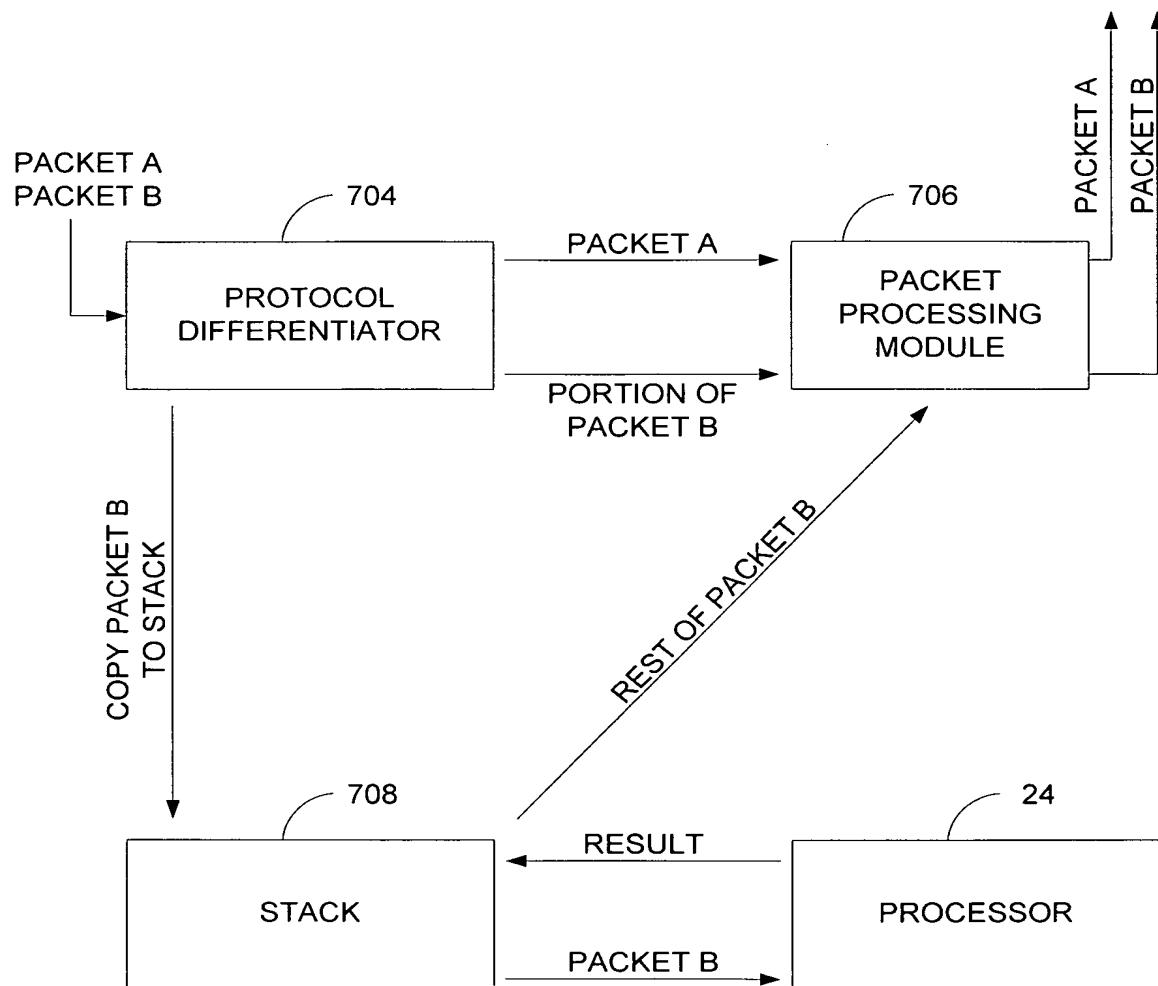


FIG. 8

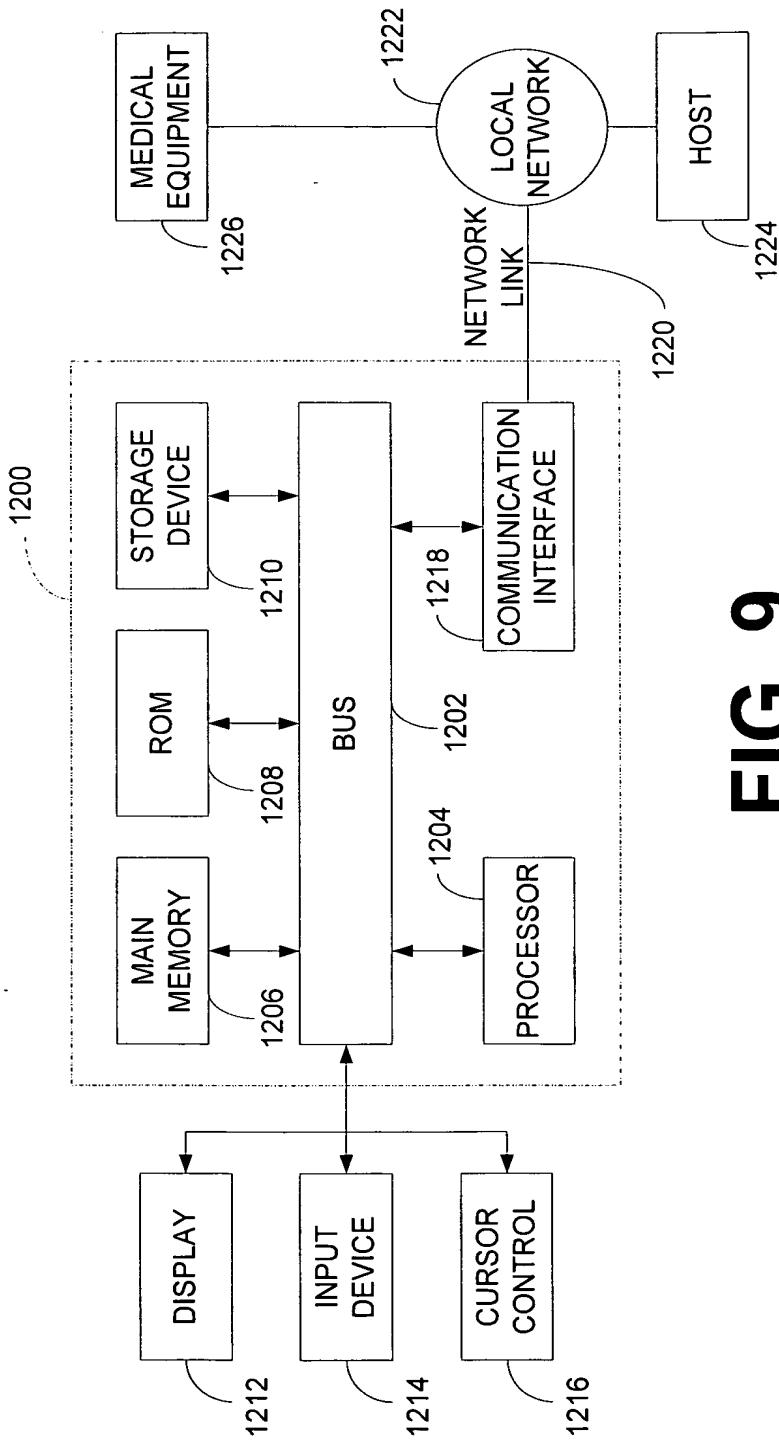


FIG. 9